

## Abstract of the Disclosure

A method for manufacturing an interlayer dielectric layer begins with a preparation of an active matrix provided with a substrate and interconnections formed on the substrate and then the prepared active matrix is set on a chamber. Thereafter, a silicon source material, e.g., a tetra-ethyl-ortho-silicate (TEOS) or modified TEOS and a hydrogen peroxide ( $H_2O_2$ ) in a gaseous state are sprayed on the active matrix. And finally, the interlayer dielectric layer is formed on the active matrix by a condensation reaction of the silicon source material and the  $H_2O_2$ .